

PROJECT #1 (MILESTONE 4)

CSC 261/461 (Database Systems), Fall 2018,
University of Rochester

Due Date: 12/15/2018 (11:59 pm)

Official due date. But, finish asap.

Introduction

This is the final milestone for this semester-long project (It's really due on the very last day of the semester)! This time, you will culminate your project with the semester-long learning. Remember the beginning of the semester, when most of you had a little knowledge about how to build a database and create a web-interface. As the end of the semester approaching, you probably are realizing how much you have learned in the process beginning with milestone 1 and ending with this last milestone. This is the time when you deliver what you had proposed in milestone 1. I believe that Milestone 1 had gone through many additions, modifications, corrections, and enhancements throughout the semester through rigorous analysis (ER diagram and BCNF decomposition) and enhancements and reached to the current stage. We have gone through all the steps required for designing a successful relational database, starting from requirement analysis to organizing the tables, creating relationships among tables, and refining (normalizing) the design. In this concluding milestone, you will deliver a full-fledged website that can interact with the underlying database system and perform necessary CRUD (create, read, update, delete) operations.

Build the complete website

In milestone 3, you have provided us your relations in your database, plus a couple of examples of connecting your website to your database. You will need to extend those examples into a complete prototype website that fulfills your goal in milestone 1. You may use any external frameworks, but **please remember to give them credits in your report**. The report that you are going to submit should include only a single URL which takes us to the home page of your site. (Note, for a few of you, who are maintaining a different site for admin, you are allowed to submit two URLs.). From this homepage, there should be options to go to different pages. All the forms and reports (showing query results) should be working. Your website must validate input and report errors whenever necessary.

Project Report

You report should contain the following components:

- **Project Description:** Give a short description of your project. Many of these components can be used from milestone 1 as it is.
- **Contribution:** Summarize how your team has split the workload throughout the semester. Provide us a table containing four columns: Project Milestone, Team Member's Name, Contribution, Contribution % for that particular milestone.
(As we now know SQL, the primary key of the table is (project milestone, student's name)!!!)
- **Summary:** Summarize your learning from this project. Include which part was the most challenging to implement, and which part was most fun (yes, the same component might be both fun and challenging). Did you achieve whatever you planned in Project 1 Milestone 1. If you have drifted from the original plan, why did that happen? All we want to see is how your project got evolved over time.

- Future Works: How will you enhance your website if you get another semester? Note that this section is no excuse for submitting an incomplete website.

Save the report as `project_report.pdf`.

Submission Instructions

Your website must be hosted on betaweb server. Create a new directory `milestone4`. The directory should have two files, `link.txt` and `project_report.pdf`. The file `link.txt` should contain the link(s) to the homepage. Create a tar file `milestone4.tar` from this directory.

```
mkdir milestone4
cp link.txt milestone4/
cp project_report.pdf milestone4/
tar -cvf milestone4.tar milestone4
```

Submit the tar file using the command:

```
~csc261/submit plm4 milestone4.tar
```

You should get a feedback whether the submission is successful or not.

You may resubmit as many times as you like; however, only the latest submission (along with the timestamp) will be saved, and we will use your latest submission for grading your work. Submissions via email will not be accepted! No late submissions allowed.

You must adhere to the naming guideline to avoid losing points.

Demo Session (optional)

To help us better understand your work, we will hold demo sessions during reading period (Dec. 13–Dec. 15) where you will have 10 minutes to show us how the website works, what your examples are and what we should expect. Although it is optional to attend the demo session, you may get higher grades if we understand your work better.

Please follow the link below and reserve **one** time slot with your **groupID** if you want to attend a demo session:

<https://goo.gl/nif7cF>

Note: As you will be quite busy with other projects towards the end of the semester, we strongly suggest that you finish Project 1 as early as possible. The due date should not make you wait for the last moment as there will be other projects due around that time (along with term papers (for grads) and the final exam).